

San Diego Air Pollution Control District

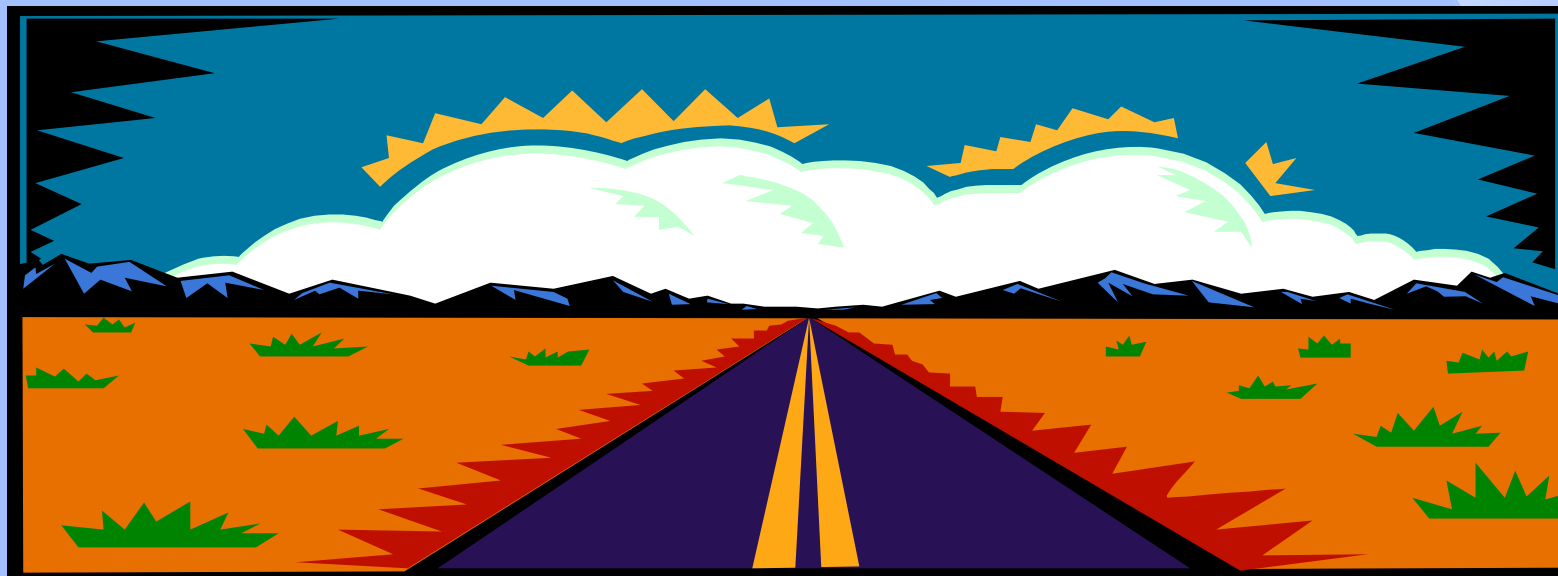
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What Has Changed Since Last Year's Conference?

- Rule 11: Exemptions From Rule 10 Permit Requirements
- Rule 67.6: Solvent Cleaning Operations
- 17 CCR 93102: California Chromium Plating ATCM (Air Toxic Control Measure)
- **DISCLAIMER: IT IS IMPOSSIBLE TO COVER ALL OF THE DETAILS OF THESE CHANGES IN 25 MINUTES. FOR FULL DETAILS SEE THE TEXT OF THESE AMENDED RULES ON THE APCD OR CARB WEBSITES.**

RECAP

APCD Rule 10: Permits Required

- Generally states that before any article, machine, equipment, etc. which may cause the issuance of air contaminants is installed or operated, an air pollution permit must be obtained. There is a list of equipment that does not need a permit (is exempt) in Rule 11.

RECAP

Examples of Equipment / Processes That May Require An APCD Permit

- Chrome plating
- Copper plating
- Chromate conversion coating tank
- Chemical milling
- Industrial wastewater treatment system
 - Wastewater evaporator
- Solvent cleaning tank (vapor or cold)
 - Process heater
- Emergency generator
- Abrasive blasting
- Painting

Rule 11 Amended 4/25/07;

Some of the new exemptions are:

- Chromate conversion coating processes where coatings are applied exclusively by brush or rollers.
- Cold solvent cleaning remote reservoirs with a sink cross sectional area of one square foot or less (0.09 square meters).

Rule 11 Changes Continued

(new permit exemption)

- Drilling machines for fiberglass parts that are exclusively vented through an intact bag filter that exhausts inside the building where such equipment is located and provided that the amount of fiberglass collected in the bag filter is below 500 pounds per calendar year per facility.

Rule 11 Changes Continued

(new permit exemption)

- Any coating or adhesive materials application operation at a stationary source where the VOC emissions from such operation are 150 pounds or less per 12-month consecutive period, excluding surface preparation and cleanup solvents.

One Example of a Specific Permit Exemption Still Contained in APCD Rule 11

- Rule 11(d)(7)(xiv) says the following equipment still does not need an APCD permit:
- “Equipment used for anodizing, plating, polishing, stripping or etching, if the volatile organic compound content of the aqueous material does not exceed 10% by weight. This exemption does not apply to acid chemical milling, chrome plating, chromic acid anodizing, chromate conversion coating processes, or the stripping of chromium. This exemption also does not apply to copper etching or plating operations which use formaldehyde, ammonium hydroxide, ammonium chloride, or solutions of nitric, hydrofluoric and/or hydrochloric acids which contain more than 17 percent acid concentration by weight.”

Permit Exemption Removed for All Types of Electric Arc and Flame Spraying Operations

- Rule 11(d)(7)(viii) now reads: “Metal and ceramic deposition spray operations where all the materials sprayed contain no chromium, lead, or nickel. This exemption does not apply when electric arc or flame spray guns are used in these operations.” (Underline added for emphasis)

Rule 67.6: Solvent Cleaning Operations

Amended 5/23/07

- Rule 67.6 – Solvent Cleaning Operations first effective 7/25/79 and revisions effective 10/16/90
- May 23, 2007 Board Action
 - Repealed Rule 67.6 effective May 23, 2008
 - Adopted & Effective Rule 67.6.1 – Cold Solvent Cleaning & Stripping Operations
 - Adopted & Effective Rule 67.6.2 – Vapor Degreasing Operations
- August 27, 2007 Compliance Advisory Sent

Rule 67.6.1 – Cold Solvent Cleaning and Stripping Operations

- Applicability – all cold solvent cleaning and stripping operations
 - Does not apply to gas-path cleaners
 - Does not apply to wipe cleaning operations or cleaning of application equipment (i.e. spray guns)
- Exemptions
 - Solvent cleaning subject to NESHAP Subpart T
 - Small cold solvent cleaning or stripping equipment
 - Cold solvent cleaners used exclusively for educational purposes
 - Operations exclusively using water-based material with a VOC content 50 grams per liter (g/l) or less. Records of the VOC content of the materials used must be kept

Rule 67.6.1 – Definitions

- “Batch-loaded Solvent Cleaner” – specifically excludes remote reservoir
- “Remote Reservoir” – redefined to include only cold solvent equipment consisting of a work area and a separate solvent tank not accessible for soaking parts
- “Water-based Material” – material consisting of only water and VOC and not containing exempt compounds (i.e. acetone)

Rule 67.6.1 – Requirements

- VOC content limit of solvent= 50 g/l or less
 - Cleaning of electronic components, electrical components, medical devices, aerospace components, or precision optics exempt from this requirement
- Remote Reservoirs – freeboard height at least 6 inches
- Stripping – freeboard ratio at least 0.75 or a sealing fluid
- Other operational and equipment standards the same as current Rule 67.6

Recordkeeping & Test Methods – Rule 67.6.1

- Keep records of cleaning and stripping material and sealing fluid used
- VOC content of material for cold solvent cleaning
- Requirement for solvent usage records is removed
- VOC content determined by SCAQMD test methods 313 or 308

Compliance Schedule – Rule 67.6.1

- Existing operations must comply within one year, by May 23, 2008
- New operations comply upon initial start-up
- Application must be submitted to APCD by November 23, 2007 for those NOT switching to a water-based material
- Once comply with Rule 67.6.1 then Rule 67.6 does not apply

Rule 67.6.2 – Vapor Degreasing Operations

- Applicability – vapor degreasing operations
- Exemptions
 - Vapor-phase solder reflow units
 - Small vapor degreasers
 - Vapor degreasing using water-based material with a VOC content 50 g/l or less

Standards – Rule 67.6.2

- Basically the same as Rule 67.6
- Vapor degreasers, regardless of size, must have either
 - an enclosed cover system,
 - a freeboard ratio of 1.0 or
 - a refrigerated freeboard chiller.

Compliance Schedule – Rule 67.6.2

- Existing operations must comply now, unless currently does not comply with standards then have until May 23, 2008 to comply
- New operations comply upon initial start-up.
- Application must be submitted to APCD by November 23, 2007 for those that must modify equipment to comply with standards

Public Workshop

November 14, 2007

9-11 a.m.

San Diego Air Pollution Control District

10124 Old Grove Road

San Diego, CA 92131

Amendments to the

Chromium Plating ATCM

17 CCR 93102 et seq.

Background

- Hexavalent Chromium identified as Toxic Air Contaminant in 1986
 - Known human carcinogen
 - No safe threshold
- ATCM History
 - Originally Adopted 1988
 - Amended 1998
 - Amended 2006*

*amendments were effective October 24, 2007

Applicability (93102.1)

- Owner/Operator of facility performing
 - Hard Chromium Electroplating
 - Decorative Chromium Electroplating
 - Chromic Acid Anodizing
- Person who sells, supplies, uses, or manufactures in California chromium electroplating or chromic acid anodizing kits.

Key Definitions (93102.3)

- Existing Facility = facility in operation before October 24, 2007
- Modified Facility = facility that has undergone a modification
- Modification = physical change to an existing permit unit that results in an increase in hexavalent chromium emissions
- New Facility = facility that begins initial operation after October 24, 2007
- Sensitive Receptor = residences, education centers, daycare centers, and health care facilities

Emission Standards (93102.4)

Existing Facilities

Existing Facilities within 300 feet of a sensitive receptor

Facility Size (amp-hr/year)	Emission Control	Effective Date
$\leq 20,000$	Use Specific Chemical Fume Suppressants	April 24, 2008
$> 20,000$ to $\leq 200,000$	0.0015 mg/amp-hr with add-on control	October 24, 2010
$> 200,000$	0.0015 mg/amp-hr with add-on control	October 24, 2009

Emission Standards (93102.4)

Existing Facilities

Existing Facilities more than 300 feet from a sensitive receptor

Facility Size (amp-hr/year)	Emission Control	Effective Date
$\leq 50,000$	Use Specific Chemical Fume Suppressants	April 24, 2008
$> 50,000$ to $\leq 500,000$	0.0015 mg/amp-hr	October 24, 2011
$> 500,000$	0.0015 mg/amp-hr with add-on control	October 24, 2009

Compliance Demonstration

Existing Facilities (93102.4)

- Submit an permit modification application to the District by February 24, 2008
 - District form available on website
- Distance to nearest sensitive receptor submitted by February 24, 2008
 - Covered by submitting modification permit application to the District for ATCM compliance

Emission Standards (93102.4)

Modified Facility

- Use add-on air pollution control device
- Hex chrome emissions of 0.0015 mg/amp-hr or less

Emission Standards (93102.4)

New Facilities

- Locate at least 1000 feet from the boundary of an area zoned residential or mixed use or any school
- Install a HEPA add-on control device
- Hexavalent chromium emissions of no more than 0.0011 mg/amp-hr

Housekeeping Requirements

- Store in closed containers in enclosed room
- Transfer in closed containers
- Clean spills within one hour
- Minimize dragout by:
 - Install drip trays between tanks on automated lines
 - Do not drip chromic acid outside tank
 - Install a splash guard
- Clean surfaces at least weekly
- Dispose of waste in a way that reduced fugitive dust
- Separate buffering, grinding, or polishing by installing a physical barrier

Other Requirements

- Lists approved chemical fume suppressants and required surface tension
- Surface tension measurement dependent on whether use a stalagmometer or tensiometer
- Contains recordkeeping, reporting, and monitoring requirements
- Training requirements for owner or operator

Reports

- Initial Compliance Status Report
 - Due by April 21, 2008 for existing facilities
 - Information required in Appendix 2
- Ongoing Compliance Status Reports
 - Due February 1st of each year
 - Covers compliance for previous calendar year – see Appendix 3
- Breakdown reports per Rule 98